



27577

PATENT TRADEMARK OFFICE

METHOD OF PRODUCING COMPOST TEA AND APPARATUS THEREFORE

ABSTRACT

Method of producing compost tea is disclosed the steps of: Introducing a flow of aqueous solution over and through a basket. This flow is used to leach and wash microorganisms and nutrients from organic compost and other organisms and nutrient rich materials from the basket into the culture tank. The culture tank collects and cultures microorganisms and nutrients creating compost tea. Compressed air is used to power this circulation instead of mechanical pumps which injure the organisms as they pass through.

TITLE OF INVENTION

Inventors: Huhn, Theodore

Assignee: Huhn, Theodore (2819 Blue Ball Road, Elkton, Maryland, USA)

Appl. No.:

Filed: December 30, 2001

Current U.S. Class: 417/208, 60/407, 210/473, 99/307, 99/307, 422/261

Field of Search: 422/261, 60/407, 210/473, 99/307, 417/208

Claims

What is claimed is:

1. A method of producing compost tea comprising the steps of:
2. Providing an apparatus comprising:
3. A reservoir tank of aqueous solution;
4. An extraction basket suspended over this tank so flow through from this basket is collected in the reservoir tank below

- page 1 of 3 -

Drawing attached



27577

PATENT TRADEMARK OFFICE

(Claims, continued)

5. Air tube runs from the reservoir to the extraction basket, is submerged at the bottom of the tank, and opens over the extraction basket apparatus.

6. Compressed air supply feeds air into the bottom of tube to force aqueous solution up the tube and into the top of the extraction basket. Solution leaches through the basket and collects in the reservoir below. These nutrients and microbes may then be cultured to increase their concentration. This solution is compost tea.

Description

Field of Invention:

This invention relates to the use of compost tea. Compost tea is a solution being used to condition soil for healthy growth of plants.

Compost tea has been recognized as a product that can reduce or eliminate the use of pesticides and synthetic fertilizers.

The positive values of compost tea have been established through University studies and practical experience.

The Compost Tea Percolator is an apparatus to culture compost tea from composted organic matter to be applied to plants and their soils to provide nutrients and desirable microorganisms.

The Compost Tea Percolator provides a method of extracting compost tea of a sprayable consistency and in large quantities competitive with current methods being used, i.e. pesticides and synthetic fertilizers.

Summary of the Invention:

The present invention provides a tank of aerobic water that circulates and aerifies the solution using a compressed air powered percolator tube. The percolator tube gently bubbles aerobic water over a basket of composted organic material, leaching the nutrients and microorganisms from the compost into the solution in the tank below. This aerobic solution is called compost tea.



27577

PATENT TRADEMARK OFFICE

(Summary, continued)

The present invention provides an efficient, usable system for producing a low cost compost tea from organic matter. At present, there is no system known to this inventor that can produce organic tea with a non-mechanical circulation system, in the quantity needed to have an impact on present methods.

Detailed Description of the Invention:

The apparatus used in the present invention for producing compost tea comprises:

1. A reservoir/collection tank,
2. A percolator tube in the tank to circulate solution over,
3. A perforated basket containing compost.

The percolator tube bubbles water from inside the tank over the perforated basket containing the compost. This aerified water leaches through the compost, carrying with it nutrients and microorganisms from the compost into the solution in the tank below.

This process of percolation creates a circulation of water up the tube, over and through the perforated basket and compost, and back into the reservoir tank, creating an aerobic compost tea solution.

Background of Invention:

Compost Tea Percolator allows a grower to leach composted organic matter, extracting the nutrients and microbes that exist in the compost into a liquid solution. These microbes are then cultured and increase beneficial microbes and their by-products. This solution can be injected into an irrigation system or sprayed on with a conventional sprayer. The cost of a Compost Tea Percolator is a small fraction of the cost of the Bio-Ject. The Compost Tea Percolator extracts nutrients and microorganisms from the compost which are present in the compost itself. These beneficial microbes are then cultured to increase the microbial population and their by-products.

(see compost tea manual, attached)

Other compost tea devices employ complicated apparatus for aerifying the water, circulating the water over the compost, and extracting or growing the compost tea solution.

Compost tea percolators use air to power the tea circulation with the advantage of minimal mechanical damage to microbes in the solution.